

RESILIENT ENERGY SYSTEMS

Mission Campaign

Selected Publications

Vulnerability Toolset

- [A Cyber-Physical Experimentation Platform for Resilience Analysis \(ADROC\)](#)
- [Increasing DER Hosting Capacity in Meshed Low-Voltage Grids With Modified Network Protector Relay Settings \(griDNA\)](#)
- [A Comparison Study of Feature Extraction and Data Fusion Techniques for Improving Cyber-Physical Situational Aware \(griDNA\)](#)
- [Considerations for Secure Data Exchange to Achieve Cyber-Physical Situational Awareness in the Electric Grid \(griDNA\)](#)

Solid State Transformers

- [Isolated Three-Phase AC-AC Converter with Phase Shift Modulation](#)

Electromagnetic Pulse Mitigation

- [Early-Time Electromagnetic Pulse Response Validation of Surge Arrester Models](#)
- [Granular metals with SiNx dielectrics](#)
- [Nanosecond Transient Validation of Surge Arrester Models to Predict Electromagnetic Pulse Response](#)

Optimizing Resilience

- [Detection and Prevention of Unintentional Formation of Loops in Self-Healing Power Systems and Microgrids \(SHAZAM\)](#)
- [Protection Approaches for Self-Healing Microgrids Using Only Local Measurements \(SHAZAM\)](#)